

Research Title	Development of Ceramic Forming Technology for Competitive Advantage
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ABSTRACT

The aim of this research was to optimize casting efficiency at lower operating time of low pressure casting apparatus; combinations of diaphragm pump, air compressor, pressure gauge, tube and valve system and porous tube contained in plaster mold. Cast slip from wet milling with specific gravity about 1.60 is flowed into the mold by pumping. Air pressures are controlled: not more than 3 kg/cm^2 for slip inlet and not more than 5 kg/cm^2 for mold removing. Operating time: slip flow-in time, green product setting time and product ejection time are collected. Casting rate and casting efficiency are investigated.

The results found that optimum casting efficiency of low pressure casting apparatus was 6:1 and casting rate was 0.55 mm/min.

Keywords: slip, low pressure, casting rate, casting efficiency